

Amendments to the Specification:

Please delete the existing Sequence Listing of the instant application and insert the attached paper copy of the Sequence Listing into the application immediately prior to the claims.

Please delete the paragraph on page 4, lines 26-29 and replace it with the following paragraph:

Figure 1A shows a nucleotide sequence, SEQ ID NO:1, of a DNA which encodes wild-type *B. anthracis* LF protein; Figure 1B shows the amino acid sequence of the full-length mature, wild-type LF protein, i.e. amino acids 34 through amino acid 809 of SEQ ID NO. 2; Figure 1C shows the amino acid sequence of the polypeptide encoded by the eukaryotic expression plasmid pCLF4 **(Residues 42-285 of SEQ ID NO: 2).**

Please delete the paragraph on page 4, line 30 to page 5, line 4 and replace it with the following paragraph:

Figure 2A shows a nucleotide sequence, SEQ ID NO.3, of a DNA which encodes a wild-type *B. anthracis* PA; Figure 2B shows the amino acid sequence, ~~SEQ ID NO.4,~~ of the full-length, mature wild-type PA protein derived therefrom, i.e. amino acid 30 through amino acid 764 of SEQ ID NO. 4; and Figure 2C shows the amino acid sequence of the polypeptide encoded by the eukaryotic expression plasmid pCPA **(Residues 204-764 of SEQ ID NO: 4).**

Please delete the paragraph on page 21, line 20 to page 22, line 1 and replace it with the following paragraph:

The eukaryotic expression plasmid, pCI (Promega Inc.), was used to evaluate whether the genes encoding the lethal factor (LF) and protective antigens (PA) could be used in formulations for construction of a DNA-based vaccine against the lethal effects of anthrax toxin. The vector, pCI (Promega Inc.), utilizes the cytomegalovirus intermediate-early promoter/enhancer region and

the SV40 late polyadenylation signal for efficient expression of encoded genes. The PA gene, nucleotides encoding amino acids 204 to 764 of SEQ ID NO:4, that was cloned into the vector includes the wild-type PA gene sequence from a furin cleavage site to the end of the gene. This PA sequence starts at amino acid 204, valine, after the ATG start codon and ends at the end of PA. The LF gene, nucleotides encoding amino acids 83 to 283 of SEQ ID NO:2, that was cloned into the vector is a mutant form of LF and the clone contains the portion of the LF gene which encodes amino acids 83 to 283. In addition, there is a mutation at amino acid 170 of SEQ ID NO:2, which changes TAT (Tyr) to TGT (Cys) **(Mutant sequence is disclosed as SEQ ID NOs: 9 and 10).**